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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,279	04/05/2005	Fang Wang	36-1892	4677

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EXAMINER	
PORTER, WILLIAM ERNEST	
ART UNIT	PAPER NUMBER
4155	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/530,279	WANG, FANG	
	Examiner	Art Unit	
	WILLIAM PORTER	4155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *19-23* are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 April 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *22 August 2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

The following is a **NON-FINAL** office action upon examination of application number 10/530,279. This office action is in response to a telephonic election/restriction by Attorney Larry Nixon on April 14, 2009. Upon restriction of claims 19-23, and the election of claims 1-18, claims 1-18 are pending in the application and have been examined on the merits discussed below.

Information Disclosure Statement

The Information Disclosure Statement filed on 22 August 2005 has been considered. An initialed copy of the Form 1449 is enclosed herewith.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-18, drawn to a method of scheduling an event, classified in class 705, subclass 8.

II. Claims 19-23, drawn to a method of distributing a plurality of tasks, classified in class 705, subclass 9.

Where two or more species are claimed, a requirement for restriction to a single species may be proper if the species are mutually exclusive. Claims 1-18 to different species 19-23 are mutually exclusive if one claim recites limitations disclosed for a first species but not a second, while a second claim recites limitations disclosed only for the second species and not the first. This may also be expressed by saying that to require restriction between claims limited to species, the claims must not overlap in

scope. (MPEP § 806.04(f)). In this case claims 1-18 recite the limitation of identifying a slot time not disclosed in claims 19-23 and claims 19-23 recite the limitation of identifying a processing capability not disclosed in claims 1-18.

Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:

(a) the inventions have acquired a separate status in the art in view of their different classification;

(b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;

(c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);

(d) the prior art applicable to one invention would not likely be applicable to another invention;

(e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) **and (ii) identification of the claims encompassing the elected invention**.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically

point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention.

Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Mr. Larry Nixon on 14 April 2009 a provisional election was made without traverse to prosecute the invention of a method of scheduling an event, claims 1-18. Affirmation of this election must be made by applicant in replying to this Office action. Claims 19-23 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

The disclosure is objected to because of the following informalities: a typographical error exists with the double occurrence of the word "that" in line 25 of page 2.

Appropriate correction is required.

Claim Objections

Claim 14 objected to because of the following informalities: typographical error makes it unclear what is the exact word "lil<e" (pg. 7, l. 3). Appropriate correction is required.

Claim 16 objected to because of an improper dependency reference to claim 14 in an attempt to switch statutory categories, from software component to a system. To rectify this situation it is suggested that the applicant copy the appropriate language from claim 14 into claim 16 and delete the reference to claim 14 within claim 16.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14, and 16-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Sandip Sen, NPL, "Developing an Automated Distributed Meeting Scheduler" hereinafter referred to as Sen).

Claim 1 –

As per claim 1, Sen discloses a method of scheduling an event ("distributed approach", pg. 41, col. 2, ll. 16-17), the event involving a plurality of resources, the method comprising performing a process in respect of each resource, the process comprising

- identifying a slot time corresponding to a time at which the resource is available; (pg. 42, col. 1, ll. 31-33)
- and creating a software component corresponding to the identified slot time, ("Agent" is software component, pg. 41, col. 3, ll. 16-17)

- wherein the software component comprises communicating means arranged to communicate with other like software components, ("invitee agents" are other software components, pg. 41, col. 3, l. 22; and "host announces meeting contracts to the invitees … Each invitee receives the contract" pg. 42, col. 1, ll. 37-42)
- and storage arranged to store data in respect of the resource corresponding to the software components and data in respect of the identified slot time; (Working memory of Fig. 1, pg. 43)
- and wherein each software component so created communicates with another like software component in order to identify a time for the event that satisfies a predetermined criterion. (pg. 42, col. 1, ll. 50-53)

Claim 2 –

As per claim 2, Sen discloses a method according to claim 1, in which identifying a time for the event includes for each slot time

- accessing the slot time data stored by the software components in order to identify software components corresponding thereto; (pg. 41, col. 3, ll. 22-23 to pg. 42, col. 1, ll. 1-7)
- using stored data in respect of the resources corresponding to the identified software components to evaluate the suitability of the slot time for the event; (pg. 42, col. 1, ll. 10-18)
- and selecting a time for the event in accordance with the evaluated suitabilities. (pg. 42, col. 1, ll. 51-53)

Claim 3 –

As per claim 3, Sen discloses a method according to claim 1, in which the process includes accessing a schedule associated with the said resource and retrieving data indicative of the availability of the resource. (pg. 42, col. 1, ll. 42-43)

Claim 4 –

As per claim 4, Sen discloses a method according to claim 1, in which, for each slot time, the method includes storing data in respect of resources corresponding to the identified software components. ("Working memory" of Fig. 1, pg. 43)

Claim 5 –

As per claim 5, Sen discloses a method according to claim 1, in which, for each slot time, the method includes

- comparing the data in respect of the resources corresponding to the identified software components with data in respect of the plurality of resources involved in the event, so as to identify those resources for which there is no software component, ("host collects and compares the bids", pg. 42, col. 1, l. 50)
- sending a message to the identified resource ("invitees", pg. 42, col. 1, ll. 37-39), the message including a request for preference information in respect of the slot time, ("meeting contracts" sent to invitees are request for "bids" (i.e., preferences), pg. 42, col. 1, ll. 37-39, ll. 41-44)
- receiving said preference information (pg. 42, col. 1, l. 50)
- if the preference information indicates that the resource is available at that slot time, updating the data in respect of the resources corresponding to the identified software components. (pg. 42, col. 2, ll. 5-8)

Claim 6 –

As per claim 6, Sen discloses a method according to claim 2, in which the step of evaluating the suitability of a slot time comprises calculating the number of resources corresponding to the identified software components corresponding to the slot time and comparing the calculated number with a specified criterion. (comparing the calculated number with a specified criterion is means to determine "if they suggest a common time interval", pg. 42, col. 1, ll. 51-52)

Claim 7 –

As per claim 7, Sen discloses a method according to claim 5, in which the step of evaluating the suitability of a slot time comprises comparing the data (pg. 42, col. 2, ll. 31-32) in respect of the resources corresponding to the identified software components with data in respect of one or

more resources whose involvement with the event is essential. ("subset of attendees" can be essential, pg. 42, col. 1, l. 14)

Claim 8 –

As per claim 8, Sen discloses a method according to claim 6, in which, if the preference information indicates that the resource is unavailable at that slot time, the method includes incorporating this preference information in the suitability evaluation. ("new proposals" are part of suitability evaluation, pg. 42, col. 2, ll. 2-4)

Claim 9 –

As per claim 9, Sen discloses a method according to claim 2, including notifying the resources corresponding to the identified software components corresponding to the slot time of the selected slot time. ("sends awards" is notifying, pg. 42, col. 1, ll. 51-54)

Claim 10 –

As per claim 10, Sen discloses a method according to claim 9, in which, in the event that the selected time becomes unavailable, the method includes sending a message indicative of a change in status of the selected slot time to the notified resources, and reviewing the stored suitability to select a replacement slot time. (pg. 42, col. 2, ll. 5-11)

Claim 11 –

As per claim 11, Sen discloses a method according to claim 1, in which the process includes storing a time of creation of the software component corresponding thereto. (the email system has a date/time stamp, pg. 43, col. 2, ll. 37-39; pg. 44, col. 2, ll. 30-31 and pg. 44, Fig. 2)

Claim 12 –

As per claim 12, Sen discloses a method according to claim 11, in which said step of identifying a slot time corresponding to a time which the resource is available includes

- identifying which of the identified software components was created first; ("priorities can be 'First-In-First-Out' (FIFO)", pg. 43, col. 3, ll. 25-27)

- adding data in respect of resources corresponding to the software components to the storage of the identified first created software component (pg. 44, col. 1, ll. 18-20)
- deleting the other software components. (pg. 44, col. 3, ll. 10-11)

EXAMINER'S NOTE.

The process of choosing a group representative ("other users attending the meeting are called invitee agents", pg. 41, col. 3, ll. 21-22) would involve deleting or removing other members ("invitee agents" = software components, i.e., "automated (computational) meeting scheduling agents", pg. 41, col. 3, ll. 16-22) from the system.

Claim 13 –

As per claim 13, Sen discloses a method according to claim 1, including selecting an initiating resource ("host agent", pg. 41, col. 3, ll. 18-20), the initiating resource being one of the plurality ("invitee agents", pg. 41, col. 3, ll. 21-22), performing the process in respect of the initiating resource, sending even details to the others of the plurality of resources, and performing the process in respect of the others of the plurality of resources. (pg. 42, col. 1, ll. 30-54, and pg. 42, col. 2, ll. 1-15)

Claim 14 –

As per claim 14, Sen discloses a software component ("implement a software system", pg. 41, col. 1, l. 19) for use in selecting a time for an event, wherein the event involves a plurality of resources, the software component comprising,

- communicating means arranged to communicate with other [like] software components (pg. 43, col. 1, ll. 50-51)
- storage arranged to store data ("Working memory" of Fig. 1, pg. 43) in respect of a resource corresponding to the software component, the data including a time at which the resource is available for the event, ("Acceptable times" of Fig. 2, pg. 44)
- the software component being arranged, in use, to communicate with other software components to identify those software components storing data relating to the same time, and, for any software components so identified, the software component is arranged to store data relating to the identified software components in the storage and

evaluate the suitability of the time for the event. (communication network connecting User's schedule components to Other scheduling agents through the Calendar manipulator module of Fig. 1, pg. 43)

Claim 16 –

As per claim 16, Sen discloses a diary system (subsystems Working memory, Negotiation module and Working memory of Fig. 1, pg. 43) for use in scheduling an event on behalf of a user, comprising

- schedule querying means arranged to identify one or more times at which the user is available for the event, ("Negotiation module" of Fig. 1, pg. 43, and pg. 43, col. 2, ll. 29-33)
- software component creating means arranged to create a software component according to claim 14, wherein the data stored in the storage thereof includes one of the identified times ("Negotiation module" of Fig. 1, pg. 43, and pg. 43, col. 2, ll. 29-33)
- schedule updating means arranged to receive, from the, or another such software component, data indicative of a time at which the event is to be scheduled, and to update the schedule in accordance therewith. ("Calendar manipulator" of Fig. 1, pg. 43, and pg. 43, col. 2, ll. 33-36)

Claim 17 –

As per claim 17, Sen discloses a diary system according to claim 16, wherein, in the event that the software component receives data indicative of a failed scheduling attempt, the software component creating means is arranged to create a further software component corresponding to one of the other times at which the user is available for the event. (pg. 42, col. 1, l. 54 and col. 2, ll. 1-4; "Negotiation module" of Fig. 1, pg. 43)

Claim 18 –

As per claim 18, Sen discloses a method of selecting a time for an event, the event involving a plurality of resources, the method comprising the steps of

- performing a process in respect of each resource, the process comprising

- identifying a slot time corresponding to a time at which the resource is available; (pg. 42, col. 1, ll. 31-33)
- creating a software component corresponding to the identified slot ("Agent" is software component, pg. 41, col. 3, ll. 16-17), the software component comprising communicating means arranged to communicate with other like software components ("invitee agents" are other software components, pg. 41, col. 3, l. 22; and "host announces meeting contracts to the invitees … Each invitee receives the contract" pg. 42, col. 1, ll. 37-42) and storage arranged to store data in respect of the resource corresponding to the software component and data in respect of the identified slot time; (Working memory of Fig. 1, pg. 43)
  - accessing the slot time data stored by the software components in order to identify software components corresponding thereto; (pg. 41, col. 3, ll. 22-23 to pg. 42, col. 1, ll. 1-7)
  - using stored data in respect of the resources corresponding to the identified software components to evaluate the suitability of the slot time for the event; (pg. 42, col. 1, ll. 10-18)
  - selecting a time for the event in accordance with the evaluated suitabilities. (pg. 42, col. 1, ll. 51-53)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sen as applied to claim 14 above, and further in view of Andrew J. Berner, Nathan S. Fish, and Sarah V. Denney, US Patent 5,923,877 (hereinafter referred to as Berner et al).

As per claim 15, Sen in view of Berner et al discloses a software component according to claim 14. Sen teaches a software component wherein

- the storage includes data identifying a time of creation of the software component (the email system has a date/time stamp, pg. 43, col. 2, ll. 37-39; pg. 44, col. 2, ll. 30-31 and pg. 44, Fig. 2 of Sen)
- the software component further being operable to access times of creation corresponding to the identified software component (pg. 43, col. 2, ll. 36-37, and Fig. 2, pg. 44, and Fig. 1, pg. 1 depict the interfacing of "Working memory" with the "Message constructor/decoder")

Sen discloses if the time of creation corresponding to the software component is later than that corresponding to any one of the identified software components. ("priorities can be 'First-In-First-Out' (FIFO)", pg. 43, col. 3, ll. 25-27) Sen does not directly disclose "the software component is operable to destroy itself". However, Berner et al teach the software component is operable to destroy itself (col. 5, ll. 66-67 of Berner et al).

It would have been obvious to one of ordinary skill in the art at the time of the invention to expand the method of Sen to include the software component is operable to destroy itself to teach the limitation of the present application. One of ordinary skill in the art at the time of the invention would have been motivated to expand the method of Sen in this way since Berner et al discusses a framework and method for solving the wild pointer problem in memory management that an object with a pointer to another object is not notified when that object is deleted so that the pointer is no longer valid (col. 1, ll. 27-29).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WILLIAM PORTER whose telephone number is (571)270-7786. The examiner can normally be reached on Monday through Thursday 8 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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